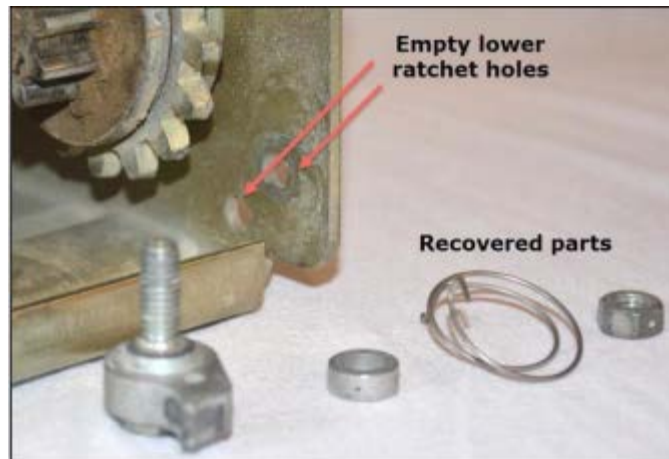


The winch at issue in this case was rigged to a light tower, which it raised and lowered. The winch uses a pawl-ratchet design to control this movement. A handle on the outside of the winch (which ultimately hit and injured Villegas' finger) connects to a ratchet gear that crosses through the inside of the winch. At the bottom of this ratchet gear is a pawl, which catches the ratchet with each crank of the handle and prevents the winch from unwinding. Because the pawl is spring loaded against the ratchet gear, it allows the gear to rotate counter-clockwise but never clockwise, thus suspending any load (such as a light tower) that is rigged to the winch. A bolt runs through the pawl, and connects it to the wall of the winch. Cequent provided images of this configuration in its motion to exclude, Docket no. 34 at 3:



After the accident, various parts were recovered. The locking nut that attaches to the bolt from the outside wall of the winch was disconnected from the bolt. The bolt was disconnected from the winch, disconnecting the pawl—which was supposed to catch the ratchet gear and prevent it (and the attached handle) from spinning—from the ratchet gear. *See* Docket no. 52 at 3:



Villegas designated J.E. Akin, Ph.D., P.E., as an expert. At a high level, Dr. Akin opines that repeated use of the winch caused the locking nut to loosen from the bolt and fall off, causing the bolt to shift. Because the bolt holds the pawl in place, the un-securing of the bolt caused the pawl to shift out of contact with the ratchet gear. Because the pawl is what prevents the ratchet gear from unwinding, the winch then unwound. Dr. Akin proposes three alternative designs, which are discussed in detail later in this order.

II. Procedural Background

There are three pending motions, but all are a derivative of the first motion. On October 14, 2016, Cequent filed its Motion to Exclude Testimony of Dr. Akin, seeing to exclude testimony from Dr. Akin under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Docket no. 34. Villegas responded on November 23. Docket no. 52. With this response,

Villegas included a declaration from Dr. Akin. Docket no. 52-3. Cequent replied on November 30, addressing the merits of its *Daubert* motion, and including a new motion to strike Dr. Akin's declaration as an untimely attempt to supplement his expert reports. Docket no. 53. On December 1, Villegas responded to the motion to strike, including in this response a motion for leave to file Dr. Akin's declaration and a sur-reply to the initial *Daubert* motion.² Docket no. 54. In light of these various filings, there are essentially two disputes—first, whether Villegas can rely on Dr. Akin's declaration in response to the *Daubert* motion first, and second, the merits of the underlying *Daubert* motion itself.

With this context in mind, more detail of the procedural history of this case is necessary:

- March 17, 2015—Dr. Akin files his first report.
- May 11, 2016—Dr. Akin files his first supplemental report.
- June 1, 2016—Scheduling order deadline for Villegas to designate experts.
- June 16, 2016—Cequent deposes Dr. Akin.
- July 13, 2016—Cequent's expert, Dr. Swanger, files his report.
- July 15, 2016—Scheduling order deadline for Cequent to designate experts.
- August 15, 2016—Scheduling order deadline for supplemental expert reports. Dr. Akin files a second supplemental report. Docket no. 26.
- September 29, 2016—Cequent files a motion to quash a Rule 30(b)(6) Notice of Deposition served by Villegas, who had not yet taken the deposition of Cequent's corporate representative. Docket no. 30.
- September 30, 2016—Scheduling order deadline for the completion of discovery. Villegas files a motion to compel the Rule 30(b)(6) deposition that Cequent seeks to quash. Docket no. 31.

² The Local Rules do not provide for the consideration of sur-replies, and Villegas did not seek leave to file this portion of Docket no. 54. *See* Local Rule CV-7(d)–(f). Therefore, the Court will only consider the portion of this filing that is a response to Cequent's motion to strike.

- October 14, 2016—Cequent files the *Daubert* motion that is the primary subject of this order. Docket no. 34.
- October 18, 2016—Cequent files a motion for leave to file trial witness and exhibit lists. Docket no. 37. In this motion, Cequent indicates that it reached an agreement on a date to present its corporate representative for a 30(b)(6) deposition, but that a dispute still exists regarding the scope of this deposition. Docket no. 37.
- October 24, 2016—This Court issues an order regarding the deposition, giving guidance as to the scope of the deposition and noting that there was no dispute regarding the date of the deposition. Docket no. 40 at 2, n. 1.
- October 26, 2016—Villegas files a motion for extension of time to respond to Cequent’s *Daubert* motion. Docket no. 43. The next day, Cequent responds to Villegas’ request for an extension of time, indicating that it is not opposed to an extension, but opposing any extension for the purpose of allowing Dr. Akin to supplement his reports. Docket no. 45 at 3 (“Cequent hereby prays that the Court grant Plaintiff’s request to extend its response deadline, but that the Court consider the reasons stated in Plaintiff’s motion and assign an appropriate new response deadline with the understanding that supplementation of Dr. Akin’s reports is inappropriate, is not a valid basis for seeking an extension of time, and should not be factored into the new deadline.”). Through a series of text orders, the Court ultimately extends the deadline for Villegas to respond to the *Daubert* motion to November 23.
- October 27, 2016—Villegas files a motion to continue trial and other deadlines. Docket no. 44. That day, Cequent responds, agreeing to a continuance of the trial setting and directly related deadlines, but opposing an extension of the already-passed discovery and expert supplementation deadlines. Docket no. 46 at 2. One week later, the Court grants a continuance of the trial setting, but states that “[n]o other deadlines are re-set or extended, including the deadlines for discovery and expert opinion supplementation.” Docket no. 50.
- November 4, 2016—Villegas deposes Cequent’s corporate representative, Tom Walstrom.
- November 23, 2016—Villegas timely responds to the *Daubert* motion, including Dr. Akin’s declaration. Docket no. 52; Docket no. 52-2.
- November 30, 2016—Cequent files a reply to the *Daubert* motion, including a motion to strike Dr. Akin’s declaration. Docket no. 53.
- December 1, 2016—Villegas files a response to the motion to strike, including a motion for leave to file Dr. Akin’s declaration and a sur-reply to the *Daubert* motion. Docket no. 54.

Because the underlying *Daubert* motion depends on the extent and nature of Dr. Akin’s opinions, the Court will first decide whether Dr. Akin’s declaration can be considered. This requires disposition of Cequent’s motion to strike (Docket no. 53) and Villegas’ motion for leave

(Docket no. 54). Then, the Court will turn to the *Daubert* motion (Docket no. 34) with its ruling on Dr. Akin's declaration in mind.

DISCUSSION

I. Dr. Akin's Declaration

The parties dispute the nature of Dr. Akin's declaration. Cequent argues that it "relies on opinions, explanations, authorities, and demonstrative exhibits not previously disclosed pursuant to the mandatory disclosure requirements of the Federal Rules of Civil Procedure, not subject to examination in Akin's deposition, and in violation of the courts [sic] explicit order that expert supplementation and discovery deadlines would not be extended." Docket no. 53 at 2. Villegas responds that Akin's declaration is "merely an elaboration of and consistent with the opinions that [Dr. Akin] expressed in his prior reports and deposition." Docket no. 54. There is no dispute, however, that the declaration is untimely under the scheduling order governing this case.

a. Legal Standard

The Federal Rules of Civil Procedure state that "[i]f a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, *unless the failure was substantially justified or is harmless.*" FED. R. CIV. P. 37(c)(1) (emphasis added). Rule 26(a) requires testifying experts to provide an expert report that includes "a complete statement of all opinions the witness will express and the basis and reasons for them; the facts or data considered by the witness in forming them; [and] any exhibits that will be used to summarize or support them," among other things. FED. R. CIV. P. 26(a)(2)(B). The Federal Rules also contemplate that opposing experts will present rebuttal evidence, *see* FED. R. CIV. P. 26(a)(2)(D), and that the original expert may supplement his testimony, *see* FED. R. CIV. P. 26(a)(2)(E).

A district court has broad discretion in deciding whether to strike expert testimony as a sanction for a violation of Rule 37. *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co. Inc.*, 73 F.3d 546, 572 (5th Cir. 1996). In exercising this discretion, courts look to four factors: “(1) the importance of the witnesses’ testimony; (2) the prejudice to the opposing party of allowing the witnesses to testify; (3) the possibility of curing such prejudice by granting a continuance; and (4) the explanation, if any, for the party’s failure to comply with the discovery order.” *Id.*

Cequent argues that “[c]ourts in this circuit have routinely rejected attempts to circumvent the expert designation rules, and have repeatedly stricken affidavits proffered in attempt to resurrect otherwise inadequate opinions.” Docket no. 53 at 4. Cequent’s characterization of the law on this point is generally correct, though it is incomplete—these cases take the additional step of determining whether a challenged, untimely expert disclosure “departs from [or] expands upon [the] original report in [any] material respects.” *E.g., Sobrino-Barrera v. Anderson Shipping Co., Ltd.*, CIV.A. H-09-3642, 2011 WL 5245396, at *3 (S.D. Tex. Oct. 24, 2011), *aff’d*, 495 F. App’x. 430 (5th Cir. 2012). Thus, Dr. Akin’s declaration is subject to being stricken only to the extent that it inserts new opinions that are not mere elaboration or supplementation. *See In re Complaint of C.F. Bean L.L.C.*, 841 F.3d 365, 371 (5th Cir. 2016); *Pratt v. Landings at Barksdale*, CIV.A. 09-1734, 2013 WL 5375951, at *2 (W.D. La. Sept. 24, 2013) (striking a declaration after finding that it “contains new opinions, not mere logical extensions, that go beyond those previously presented” and that “appear to be based upon information available prior to the deadline for service of initial expert reports.”). Further, as indicated by the plain language of Rule 37, the testimony will only be stricken where it is not “substantially justified or harmless,” and where a balance of the *Sierra Club* factors indicates that it should be stricken.

b. Portions of Dr. Akin's Declaration that Respond to Tom Walstrom's Deposition

The Court will first assess the newest, most original portions of Dr. Akin's declaration; as Villegas himself admits, "Dr. Akin did include in his declaration a discussion of the very recently obtained testimony of Cequent's corporate representative, and he explains how that testimony is consistent with and supports his opinions and, more importantly, how it contradicts the factual basis for some of [Cequent's expert's] opinions. This testimony does not change any of Dr. Akin's Opinions, but it certainly rebuts [Cequent's expert's] opinions." Docket no. 54 at 2. This admission is a reference to the 30(b)(6) deposition of Cequent's corporate representative, Tom Walstrom, which was taken after the deadline for supplemental expert reports.

The portions of Dr. Akin's declaration that incorporate or respond to Walstrom's deposition are not stricken under Rule 37. The Rule only warrants exclusion of expert testimony as a sanction where the failure to disclose that testimony is not "substantially justified." Failure to disclose the specific portions of the declaration that respond to Walstrom's deposition is substantially justified because Dr. Akin had not yet had a chance revise and supplement his own opinions with the benefit of deposition testimony from Cequent's corporate representative. Indeed, courts generally reject "untimely supplemental expert testimony where the opinions are *based upon information available prior to the deadline for expert disclosures.*" *Landings at Barksdale*, 2013 WL 5375951, at *2 (emphasis added). Because Walstrom's deposition was not taken until *after* the deadline for expert disclosures, these portions of Dr. Akin's declaration are based on information that *was not* available prior to the deadline for expert disclosures.

This fact, when viewed through the four *Sierra Club* factors, justifies not striking these portions of Dr. Akin's declaration. *See Sierra Club*, 73 F.3d at 572. As to the first factor—importance of the testimony—Dr. Akin's expert testimony will be critical to Villegas' case in this products liability action, and these portions, which were given in light of Cequent's view of

its own products, will be especially important. The second and third factors—prejudice to Cequent and possibility of curing prejudice by granting a continuance—are intertwined in this case because a months-long continuance has already been granted, giving Cequent additional time to prepare for these new portions of Dr. Akin’s opinions. Finally, the explanation for the failure to timely disclose—that the new opinions were based on facts from a deposition that had not yet been taken—is the strongest factor cutting against striking these portions of the declaration.

As a result, portions of Dr. Akin’s declaration that are based upon the new information provided by Walstrom’s deposition are not stricken.³ Cequent’s Motion to Strike (Docket no. 53) is DENIED IN PART with respect to these portions, while Villegas’ Motion for Leave (Docket no. 54) is GRANTED IN PART with respect to these portions.

c. Remaining Portions of Dr. Akin’s Declaration

In analyzing whether the remaining portions of Dr. Akin’s declaration should be stricken, the Court looks to Rule 37 and the same four factors set forth in *Sierra Club*—“(1) the importance of the witnesses’ testimony; (2) the prejudice to the opposing party of allowing the witnesses to testify; (3) the possibility of curing such prejudice by granting a continuance; and (4) the explanation, if any, for the party’s failure to comply with the discovery order.” *Sierra Club*, 73 F.3d at 572. Within this framework, district courts in this circuit frequently put heavy significance on the novelty of untimely expert testimony. *See, e.g., Cleave v. Renal Care Group, Inc.*, CIV.A. 2:04CV161-P-A, 2005 WL 1629750, at *2 (N.D. Miss. July 11, 2005); *Sobrino-Barrera v. Anderson Shipping Co., Ltd.*, CIV.A. H-09-3642, 2011 WL 5245396, at *3 (S.D. Tex. Oct. 24, 2011), *aff’d*, 495 Fed. Appx. 430 (5th Cir. 2012) (“Courts routinely reject untimely

³ For clarity, the portions that are not stricken because they are based on information not previously available are: (1) the entirety of subsection A, Docket no. 52-3 at 3–6; (2) the entirety of subsection C, Docket no. 52-3 at 8–9; and (3) the entirety of subsection D, Docket no. 52-3 at 9–12.

‘supplemental’ expert testimony where the opinions are based upon information available prior to the deadline for expert disclosures.”).

The untitled introductory portion of Dr. Akin’s declaration states his qualifications and experience. Docket no. 52-3 at 1–2. This information is contained in his initial expert report and CV. Docket nos. 34-1 at 3–4; 34-3 at 92–109. Accordingly, because Cequent has had this information for months, Dr. Akin’s inclusion of it in his untimely declaration is harmless to Cequent under Rule 37. Cequent’s motion to strike is denied as to this portion and Villegas is granted leave to file this portion.

Subsection B of Dr. Akin’s declaration is a compilation of various studies and articles that Dr. Akin says support his opinions. Docket no. 52-3 at 6. At his deposition on June 16, 2016, Dr. Akin was asked to cite academic support for his theories, but could not recall any specific references. Though the laundry list of citations provided in the declaration might fairly be considered an extension of Dr. Akin’s underlying theory generally, it must nonetheless be stricken. The prejudice to Cequent in having to assess this list, without the benefit of its expert being able to supplement his reports accordingly, is great, even though some of this prejudice has been ameliorated by the continuance. In addition, there is no justification whatsoever offered for the failure to provide these citations, especially considering that he was challenged on this point at his deposition and had over two months to supplement his opinions within the scheduling order deadlines. Accordingly, Subsection B is stricken.

Subsection E is Dr. Akin’s response to a “mischaracterization” of his opinions as misapplications of the Junker Theory, a specific scientific theory that Cequent says Dr. Akin relied upon. Docket no. 52-3 at 13. This section is largely composed of entirely new information. Dr. Akin’s declaration is the first point in this case in which he raises the possibility that a

cylindrical spacer in the winch played a role in the Junker Theory's application; indeed, this is the reference that Dr. Akin makes reference to the cylindrical spacer at all, even though he addresses the Junker Theory head-on in his second supplemental report. *See* Docket no. 34-5 at 4. In addition, this subsection contains a detailed finite element study—complete with computer modeling—that incorporates this idea. As with the laundry list of citations in support of his opinions, this portion of the declaration is highly prejudicial to Cequent—it introduces an entirely new theory into the mix in response to Cequent's motion. At minimum, Cequent will be prejudiced in the disposition of its *Daubert* motion by not being able to challenge Dr. Akin's new opinions, even though the continuance may have alleviated prejudice in other respects. Further, this theory is not overly important to Villegas' case because Dr. Akin provides other theories. And again, there is no explanation whatsoever as to why Dr. Akin did not or could not have timely set forth this opinion. Accordingly, Subsection E of the declaration is stricken.

Subsection F of Dr. Akin's declaration points out what he calls a "mischaracterization by Cequent of [his] opinion regarding manual removal of the lock nut." Docket no. 52-3 at 18. This portion of the declaration adds no new facts, opinions, or information, but merely points out how Cequent's *Daubert* motion misquoted a statement from his second supplemental report. *Id.* In a nearly verbatim fashion, Villegas' response to the *Daubert* motion points out the same mischaracterization of Dr. Akin's quote. Docket no. 52 at 19–20. There is no harm to Cequent in permitting Dr. Akin to point out the same critique. Cequent's motion to strike is denied as to this portion and Villegas is granted leave to file this portion.

Subsection G of Dr. Akin's declaration discusses the warnings and instructions that Cequent included on and with the winch. Docket no. 52-3 at 18–19. The substance of this section appears to be a verbatim recitation of a paragraph in Dr. Akin's second supplemental report.

Compare id. with Docket no. 34-5 at 5. Again, this portion of the declaration is harmless to Cequent. Cequent's motion to strike is denied as to this portion and Villegas is granted leave to file this portion.

d. Summary of Dr. Akin's Declaration

Cequent's Motion to Strike (Docket no. 53) is DENIED IN PART and Villegas' Motion for Leave (Docket no. 54) is GRANTED IN PART with respect to the following portions of Dr. Akin's declaration: the untitled introductory paragraph on pages 1–2; subsection A; subsection C; subsection D; subsection F; and subsection G. These portions are NOT STRICKEN.

Cequent's Motion to Strike (Docket no. 53) is GRANTED IN PART and Villegas' Motion for Leave (Docket no. 54) is DENIED IN PART with respect to the following portions of Dr. Akin's declaration: subsection B; and subsection E. These portions are STRICKEN.

II. Cequent's *Daubert* Motion

a. Dr. Akin's Opinions and Cequent's Challenges

As outlined above, Dr. Akin generally believes that the pawl and bolt fell as a result of the locking nut loosening, which caused the pawl to disengage from the ratchet gear. The parties' central dispute is Dr. Akin's explanation of *how* the locking nut loosened.⁴

The heart of Dr. Akin's opinion is that the ratchet gear exerts transverse forces⁵ on the pawl and bolt in the course of normal use, which, when combined with axial forces⁶ that also act

⁴ Cequent reads Dr. Akin's testimony as setting forth *two* explanations for how the locking nut loosened. His first is far more developed, and the second (that the locking nut was manually loosened) came to light only after his deposition. As Villegas points out, however, Dr. Akin does not actually subscribe to the manual loosening theory, and addresses it only in the context of Cequent's expert's opinion. Dr. Akin addresses this second possibility because one of his proposed alternative designs—which contains a second ratchet/pawl mechanism—may have prevented the winch from failing, regardless of how the locking nut loosened. Docket no. 34-5 at 3. Because Dr. Akin does not actually hold the opinion that the cause of the winch's failure in this case was manual loosening of the locking nut, it is unnecessary to rule on the admissibility of such an opinion.

upon the bolt, result in “the lock nut vibrat[ing] off.” Docket no. 34-2 at 7. Dr. Akin’s first expert report states that “[s]ince the mid-1960s it has been known that transverse loads have a much larger loosening effect on a lock nut than axial loads do. The lock nut can lose its axial force pre-stress with as little as 200-300 transverse load cycles. The nature of the winch design subjects the shoulder bolt to many times that number of transverse load cycles.” Docket no. 34-1 at 8. At his deposition, Dr. Akin described the relationship between this vibration and “transverse loads” as follows:

The transverse—repeated transverse forces would loosen the nut and would make the nut become inclined as we’ve seen. And so every time that it was subsequently clicked with a gear, engaging a gear, there would be a vibration. Since now it is tilted there’s also a vibration in the direction of the bolt as well as perpendicular to the bolt. That’s—that’s what I meant by that vibration. The tilting—the loosening causes an inclination. The engagement of the member causes the transverse forces which amplify the loosening because they now apply forces also in the axial direction. In other words, every click it’s vibrating.

In reaching his conclusion, Dr. Akin inspected the parts of the failed winch that were recovered at the scene, and compared them to a model winch. Docket no. 34-1 at 5–10. Dr. Akin also cites generally known propositions in the scientific and engineering communities. He states that “[t]he scientific principles that I have applied in my analysis involve forces and engineering mechanics that have been tested, peer reviewed, subject to controlling standards, and generally accepted within the scientific community.” Docket no. 52-3 at 3. He describes “[t]he initial elementary concept” of his theory as the assumption that “the [bolt] at issue is a cantilever beam,” which Galileo first conceived of in 1638 and John Bernoulli later refined in 1725. *Id.* From this premise, he explains that such a beam would be included, by design, to support transverse loads. *Id.* He describes this foundation for his opinion as “‘common knowledge’ to a

⁵ The type of “transverse load” that Dr. Akin describes is one that acts “horizontally or longitudinally” (i.e., from a perpendicular angle) upon the bolt. Docket nos. 34-3 at 23, 52-3 at 3.

⁶ As opposed to a transverse load, which acts perpendicularly, an axial load is distributed *along* an axis.

person of ordinary skill in the art.” *Id.* Throughout his involvement in this case, Dr. Akin has used similar terminology to describe the scientific support for the effect of transverse loads. *E.g.*, Docket nos. 34-1 at 8, 34-4 at 30.

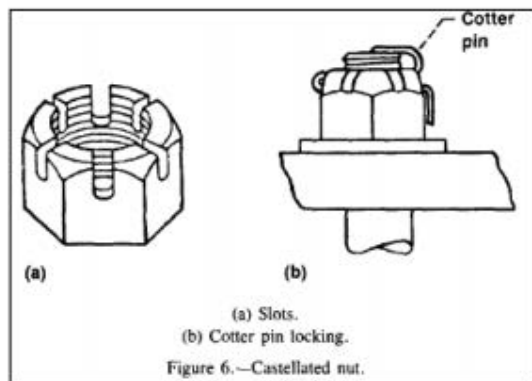
In response, Cequent makes much of the Junker Theory, a term that Dr. Akin used only after Cequent’s expert mentioned it. Cequent argues that Dr. Akin’s “general conclusion is based on the Junker theory which states that ‘two members moving in opposite directions may overcome the friction between the bolt head, the nut, and the members, and create a force that moves the nut preferentially along the inclined plane of the spiral bolt head.’” Docket no. 34 at 8. Dr. Akin, maintaining that Cequent is putting words in his mouth, nonetheless addressed the Junker Theory in his second supplemental report, stating that the pawl clicking against the bolt is the first moving member and the wall of the winch—through which the bolt is threaded—is the second. Docket no. 34-5 at 4. Otherwise, Dr. Akin opines that the Junker Theory “explains just one of the many types of conditions that can cause the loosening of nuts and bolts due to transverse loads.” Docket no. 52 at 14.

Cequent also points out that Dr. Akin may have disregarded evidence of a potential alternative cause of the winch’s failure—that the locking nut was manually altered, loosened, or improperly maintained. At his deposition, Dr. Akin admitted that there “appear to be tool marks” on the side of the winch surrounding the lock nut, “show[ing] that—or imply[ing] that some tools have been applied to the lock nut.” Docket no. 34-3 at 11–12. Dr. Akin’s opinions do indeed recognize “loosening or removal of the locking nut” as a potential “mode of failure,” but he does not address why his vibration theory is a more likely explanation, though he does recognize marks on the side of the winch around the locking nut that look like tool marks. Docket nos. 34-2 at 6, Docket no. 34-3 at 11. Importantly, though, Dr. Akin does not actually

subscribe to the manual loosening theory; he simply recognizes that it is one possible “mode of failure” and states that one of his proposed alternative designs, which includes an additional ratchet-pawl mechanism would be a fix for this problem as well. *Id.*; Docket no. 34-5 at 2–4; *see also supra* footnote 4.

Aside from examining the component parts of the winch that were retrieved after the incident occurred and examining a model winch, Dr. Akin did not test his opinion. Cequent argues that this failure to test is “fatal” to Dr. Akin’s testimony. Docket no. 53 at 8.

Dr. Akin proposes three alternative designs based on his opinion of how the winch failed. One of these alternative designs suggests adding an additional ratchet-pawl mechanism inside the winch. Docket no. 34-2 at 6. The other two proposed alternative designs suggest replacing the locking nut with a caster nut and either of two types fasteners, a cotter pin or an R-pin, which he explains would not be loosened due to transverse forces or vibration:



Docket nos. 34-1 at 10–11; *see also* Docket no. 52 at 6. As with his general theory for the failure of the winch, Dr. Akin did not test alternative designs, but he did provide NASA’s “Fastener Design Manual” describing the proposed alternative fasteners. Docket no. 34-2 at 9–12.

b. Legal Standard

Rule 702 of the Federal Rules of Evidence provides for the admissibility of expert testimony if it will “help the trier of fact to understand the evidence or to determine a fact in issue.” FED. R. EVID. 702. Additionally, the testimony must be “based on sufficient facts or data” and be “the product of reliable principles and methods” that the expert has “reliably applied” to the facts of the case at hand. *Id.*

As a preliminary matter, the Court must determine whether the proffered witness qualifies as an expert. “Before a district court may allow a witness to testify as an expert, it must be assured that the proffered witness is qualified to testify by virtue of his ‘knowledge, skill, experience, training, or education.’” *United States v. Cooks*, 589 F.3d 173, 179 (5th Cir. 2009) (quoting FED. R. EVID. 702). Generally, if there is some reasonable indication of qualifications, the court may admit the expert’s testimony, and then the expert’s qualifications become an issue for the trier of fact, rather than for the court. *Rushing v. Kansas City S. Ry. Co.*, 185 F.3d 496, 507 (5th Cir. 1999).

If the expert is qualified, then the Supreme Court’s decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) provides the analytical framework for determining the admissibility of expert testimony. *Daubert* requires the district courts to act as “gatekeepers” to ensure expert testimony meets Rule 702’s standards. *Id.* at 589. This role requires “that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Id.* at 597; *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 244 (5th Cir. 2002) (“In short, expert testimony is admissible only if it is both relevant and reliable.”).

The reliability inquiry entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and can be properly applied to the facts in issue. *Id.* at 592–93. In *Daubert*, the Supreme Court enumerated five nonexclusive

factors to consider when assessing whether the methodology upon which an expert rests his opinion is reliable: (1) whether the expert's theory can be or has been tested, (2) whether the theory has been subject to peer review and publication, (3) the known or potential rate of error of a technique or theory when applied, (4) the existence and maintenance of standards and controls, and (5) the degree to which the technique or theory has been generally accepted in the scientific community. *Id.* at 593–94; *Burleson v. Tex. Dep't of Criminal Justice*, 393 F.3d 577, 584 (5th Cir. 2004).

The test for determining reliability is flexible and can adapt to the particular circumstances underlying the testimony at issue. *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 138 (1999); *see also Black v. Food Lion, Inc.*, 171 F.3d 308, 311–12 (“In the vast majority of cases, the district court first should decide whether the factors mentioned in *Daubert* are appropriate.”). The point of this inquiry “is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Kuhmo Tire*, 526 U.S. at 152.

In applying the *Daubert* test, the proponent of expert testimony has the burden to prove by a preponderance of the evidence that evidence is reliable (not that it is correct). *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 276 (5th Cir. 1998). Expert testimony must be reliable “at each and every step” because “[t]he reliability inquiry applies to all aspects of an expert's testimony: the methodology, the facts underlying the expert's opinion, the link between the facts and the conclusion, *et alia*.” *Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 355 (5th Cir. 2007) (quoting *Heller v. Shaw Indus, Inc.*, 167 F.3d 146, 155 (3d Cir. 1999)). Meanwhile, “[t]he expert's assurances that he has utilized generally accepted scientific methodology [are]

insufficient.” *Moore*, 151 F.3d at 276. Critically, however, the district court must “approach its task with proper deference to the jury’s role as the arbiter of disputes between conflicting opinions.” *United States v. 14.38 Acres of Land, More or Less Sit. in Leflore Cty., Miss.*, 80 F.3d 1074, 1077 (5th Cir. 1996) (internal quotations omitted).

c. Application—Reliability of Dr. Akin’s Opinions⁷

Villegas has shown by a preponderance of the evidence that Dr. Akin’s opinions are reliable under *Daubert*. In reaching this conclusion, the Court recognizes that there are deficiencies in Dr. Akin’s opinions, Cequent points out. Ultimately, however, these deficiencies go to the weight, not the admissibility, of Dr. Akin’s testimony and are best raised through a “vigorous cross examination” of Dr. Akin. *See Daubert*, 509 U.S. at 596.

After striking subsection B of Dr. Akin’s late-filed declaration (a list of various academic articles), Cequent is correct that Dr. Akin does not cite many specific scientific theories by name. Throughout his various reports, deposition testimony, and declaration, Dr. Akin maintains that the scientific underpinnings of his theory are “generally known,” “common knowledge,” or “Physics 101.” The most specific sources from the scientific community that he cites are Galileo, Bernoulli, and Sir Isaac Newton. Though they are passing references, they give some indication of the scientific and theoretical underpinnings of Dr. Akin’s opinion.

Despite being thin on specific citations, Dr. Akin’s proposed testimony is based on more than his “assurances that he has utilized generally accepted scientific methodology.” He explains how the referenced scientific principles apply in this case. As an example, Dr. Akin discusses the Junker Theory in response to Cequent’s expert, explaining that the pawl on one end and the wall of the winch on the other could have been the moving members required by this theory. On this

⁷ Because Cequent does not object to Dr. Akin’s qualifications or the relevance of his testimony, the only legal issue is whether his opinions are reliable.

point, there seems to be a simple disagreement between the experts as to how and whether the Junker Theory could have loosened the lock nut; this is a question for the jury, and Cequent can further its case by cross examining Dr. Akin at trial. Beyond this reference, Dr. Akin's reports and deposition testimony give a detailed explanation of how transverse and axial forces could cause the locking nut to loosen.

Importantly, Dr. Akin's opinions are also based on his examination of the recovered parts from the failed winch and an exemplar winch of the same model. As such, this is not a case of *ipse dixit* (an assertion without proof). Instead, Dr. Akin used his experience and background in science and engineering to examine and compare the recovered parts to a model winch. Though Dr. Akin's opinions are not perfect, they are reliable enough to go before a jury, and their imperfections are issues of weight and not admissibility.

Cequent argues that that Dr. Akin failed to rule out the alternate possibility that the locking nut was manually loosened, rendering his testimony unreliable. At a high level, this Court has repeatedly held that an expert's ignorance of certain facts—such as the tool marks around the locking nut—is a matter of probative weight, rather than admissibility, of evidence. *E.g., Sheet Metal Workers Int'l Ass'n Local Union No. 67 v. Todd-Ford Management Co.*, 2005 WL 5977617, SA-03-CA-290-XR, 2005 WL 5977617, at *2 (W.D. Tex. July 12, 2005). In this particular case, Cequent's argument is even less compelling because the record simply raises the possibility that the locking nut was manually loosening without establishing that it in fact was loosened; the record does not “establish[] specific intervening events that an expert was aware of but did not rule out.” *Orthoflex, Inc. v. ThermoTek, Inc.*, 986 F. Supp. 2d 776, 802 (N.D. Tex. 2013). In cases where an expert's failure to rule out alternative possibilities is truly damaging to his reliability, the record establishes that specific intervening events occurred; though such

events *possibly* intervened here, the record does not so clearly establish them. *See id* (citing *Michaels v. Avitech, Inc.*, 202 F.3d 746, 753 (5th Cir. 2000) (excluding expert testimony as unreliable where the expert made “no attempt” to rule out the “numerous other sources of contamination” that were established on the facts)).

Cequent also argues that Dr. Akin never tested his theory, which is fatal to the reliability of his testimony. On the facts, this argument is undisputed—Dr. Akin never tested his theories in this case. Legally, however, this fact is far from fatal to Dr. Akin’s testimony. The case law cited by Cequent indicates that an expert’s failure to test is, at most, a factor that weighs against the reliability of his testimony, but it is not alone dispositive of the reliability question. *Rogers v. Bonnett*, CIV SA-04-CA-0118-XR, 2009 WL 2461820, at *5 (W.D. Tex. Aug. 11, 2009).

More importantly, however, Cequent overlooks the flexible nature of the *Daubert* inquiry—the Court must determine the appropriate weight to afford to this factor in the first place. *Food Lion, Inc.*, 171 F.3d at 311–12; *see also Kuhmo Tire*, 526 U.S. at 150–51. Here, Dr. Akin relied on his years of engineering experience and understandings of what he describes as elementary physics and engineering principles. He inspected the leftover parts of the failed winch and inspected a model winch as well. On similar facts and methodologies, numerous district courts in this circuit have recognized that a failure to test goes to the weight, not the admissibility, of the evidence. *Sulak v. Am. Eurocopter Corp.*, 4:09-CV-651-Y, 2012 WL 6567237, at *9 (N.D. Tex. Dec. 17, 2012); *ThermoTek*, 986 F. Supp. 2d at 802.

Finally, Cequent makes a similar argument on lack of testing with respect to Dr. Akin’s proposed alternative designs. As with the more general testimony, a failure to test alternative designs, without more, does not render testimony unreliable. *Guy v. Crown Equip. Corp.*, 394 F.3d 320, 327 (5th Cir. 2004). Other than pointing out this failure to test, Cequent states that the

two alternatives that replace the locking nut with different fasteners overlook that these fasteners could apply only in lower torque situations and that these fasteners (which are not removable) would need to be removed for maintenance. Cequent also objects that if transverse forces caused vibrations that loosened the locking nut on one ratchet-pawl mechanism, then the same would occur in a design that includes a second ratchet-pawl mechanism. These are not objections to how Dr. Akin arrived at his conclusions and whether those conclusions are reliable; these are objections to the correctness of the conclusions themselves, which should be resolved by a jury after cross examination.


In sum, Dr. Akin has relied upon his engineering background, knowledge of basic principles, and inspection of the winch at issue in this case in formulating his testimony. The deficiencies identified by Cequent can be developed at trial through cross-examination. For now, the Court simply holds that Dr. Akin's opinions are sufficiently reliable to go before the jury, which can ultimately determine the weight of Dr. Akin's testimony.

CONCLUSION

For the foregoing reasons, Cequent's Motion to Strike (Docket no. 53) and Villegas' Motion for Leave (Docket no. 54) are GRANTED IN PART and DENIED IN PART as described in this order. Cequent's Motion to Exclude the Expert Testimony of Dr. Akin (Docket no. 34) is DENIED.

It is so ORDERED.

SIGNED this 1st day of March, 2017.



XAVIER RODRIGUEZ
UNITED STATES DISTRICT JUDGE